DATA BULLETIN

Bureau of Student Assessment and Research

September 2002

The State of Physical Education, 2000-01

Physical education is an essential part of the core curriculum for all students. Quality physical education programs provide children with the knowledge, skills and attitudes needed to develop and maintain an active and healthy lifestyle. An increasing number of studies has heightened public awareness and understanding about the benefits of physical activity and the risks of not being physically active. This bulletin is an excerpt of the 2000-01 *Condition of Education* and is designed to provide citizens and policymakers with information about the current status of physical education in our state and to establish a baseline to track improvements in its quality. For further information, please refer to the 2000-01 *Condition of Education* or visit the Department's web site at www.state.ct.us/sde.

This bulletin addresses the extent to which students in Connecticut are receiving physical education and are provided with opportunities for physical activity. In the following pages, data are presented on key physical education opportunity-to-learn indicators such as staffing, instructional hours, facilities, curricular offerings and other opportunities for physical activity. Although not comprehensive, these data nevertheless provide important clues to the general condition and trends in physical education in Connecticut public schools.

Physical Education Staffing

Connecticut General Statutes Sec. 10-16b requires that public schools offer "planned, ongoing, and systematic" instruction in physical education "taught by a legally qualified teacher." Trained professionals certified in physical education are necessary for the development, application and assessment of specialized physical skills and concepts to assist students in establishing and maintaining a healthy lifestyle. Student/teacher ratios should be consistent with those in other content areas. An acceptable ratio should be established after considering the student population, safety concerns, size of the instructional space and the activities in the curriculum. In 2000-01, there were 1,838 teachers working in physical education. Since 1993-94, the number of full-time equivalent physical education teachers has risen by 20.4 percent (from 1,384.0 to 1,667.0).

Beginning teachers in physical education must participate in the Beginning Educator Support and Training (BEST) program. Trained mentors with specific knowledge of physical education content, teaching methods and instructional strategies are necessary and provide a continuum of professional preparation and development. The low percentage of trained mentors, cooperating

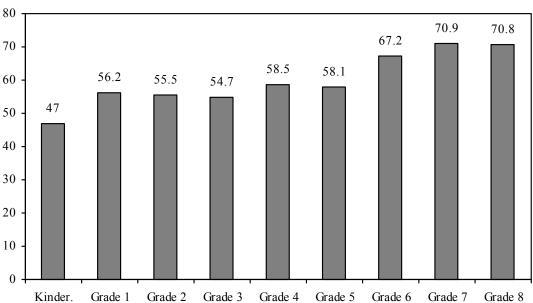
Staffing 2000-01						
Number of Full-time Teachers	1,388					
Number of Part-time Teachers	450					
Full-time Equivalent	1,667.0					
Percent Female	42.9					
Percent Minority	4.1					
Percent with Advanced Degree	64.9					
Percent Trained as BEST Mentors, Assessors or Cooperating Teachers	20.8					
Median Age	44.0					
Median Experience	17.0					

teachers and assessors raises concerns when it is compared with the median age and median experience of physical education teachers. This percentage will need to increase as a turnover in staff occurs over the next few years.

Instructional Frequency and Hours

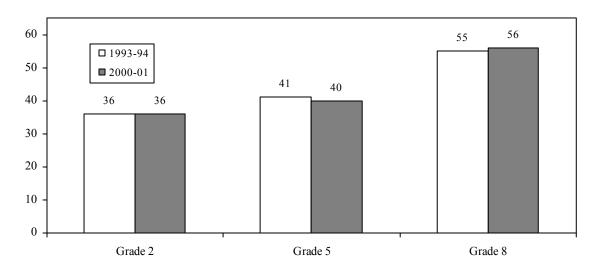
The National Association of Sport and Physical Education recommends that all children from kindergarten through Grade 12 have quality daily physical education. The Centers for Disease Control (CDC) Guidelines for Physical Activity in schools recommend that children have a moderate amount of physical activity on most, if not all, days of the week. The word continuously used is that the participation in physical activity be "regular." What matters most is how frequently children participate in physical activity. Elementary and middle schools averaged less than two sessions of physical education per week.

Average Number of Sessions per Year, 2000-01



While not as important as the frequency, the total hours of instruction is another indicator of the time spent in physical education. During the period from 1993 to 2001, the overall hours of elementary and middle school instructional time in physical education remained stable. This statistic, coupled with the frequency data, should raise concern.

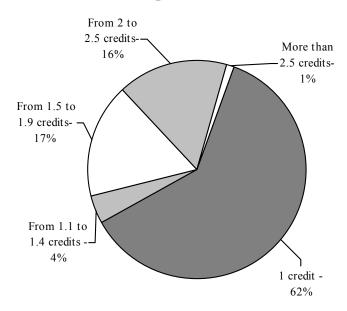
Average Hours of Instruction per Year, 1993-94 and 2000-01



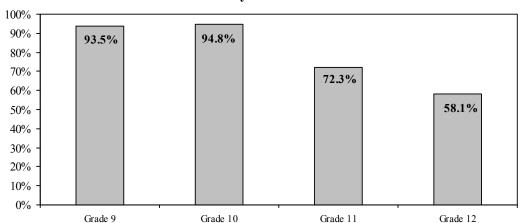
Credits Required for Graduation

In accordance with Connecticut General Statutes Sec. 10-221a, high school students must obtain a minimum of one credit in physical education for graduation. 2001, 38 percent of the schools required more than one credit. Local boards of education decide how that one credit is scheduled across the four years of high school. Nationally, it has been noted that the percentage of high school students enrolled in physical education declines from 9th grade to 12th grade. In Connecticut, this trend is seen in the decrease in the number of high schools that require students to take physical education from Grades 9 through 12.

Credits Required for Graduation



Percent of High Schools Requiring Physical Education Courses By Grade



High School Grade Weighting

College-bound students are typically concerned about their grade point average. For kinesthetic learners, physical education provides an area of success. Quality physical education programs include performance-based assessments and assign students homework emphasizing content literacy. The majority of both two- and four-year colleges require all students to take a course in wellness consisting of both physical education and health. A little over 50 percent of state high schools weight physical education equally with other courses for the purposes of honor roll, G.P.A., class rank, etc.

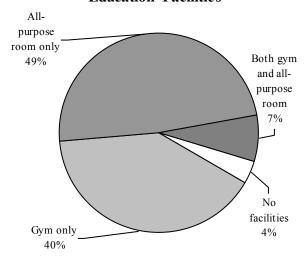
High School Physical Education Grade Weighting					
	Count				
Grades Weighted Equally	89				
Grades Weighted Unequally	66				

Facilities

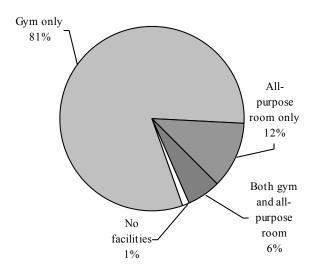
Facilities for physical education vary immensely. There should be designated indoor and outdoor spaces designed primarily for physical education instruction. Dedicated gyms are provided in 47 percent of the elementary schools. All-purpose rooms are the only provision in 49 percent of the elementary schools. In these areas, other activities can take priority over physical education. This can greatly impact the frequency, consistency and quality of the instruction.

The overwhelming majority of middle and high schools have a dedicated gym which, based on size, can provide more than one teaching station. High schools and some middle schools provide a variety of teaching stations reflected in their curricular offerings. The provision of adequate space to ensure student safety and to provide for the variety of activities defined in the curriculum is essential to the physical education program. Four percent of elementary schools and six percent of high schools report having no gymnasium facilities at all. Most of these schools are charter or alternative schools.

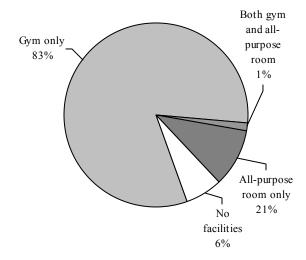
Elementary School Physical Education Facilities



Middle School Physical Education Facilities



High School Physical Education Facilities



Facilities (continued)

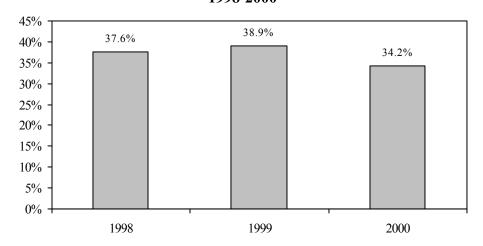
All levels are beginning to expand curricular offerings through the use of community facilities. For example, 35 percent of high schools and middle schools have used community-based facilities over the past two years. This is necessary if schools expect students to meet the overall goal of "choosing to participate regularly in physical activities designed to maintain and enhance healthy lifestyles" both now and in the future. (*The Connecticut Framework K-12: Curricular Goals and Standards*, Connecticut State Department of Education, Hartford CT – 1998)

Percent of Schools that Used Community-based Recreational Facilities In 1999-2000 and/or 2000-2001				
Elementary Schools	21.8%			
Middle Schools	35.7%			
High Schools	35.0%			

Connecticut Physical Fitness Assessment

Physical fitness should be a result of the balance of activities that are provided in the physical education programs at school and continued by the family and community. The Connecticut Physical Fitness Assessment is a health-related assessment that focuses on promoting optimum health and preventing the onset of diseases and problems associated with inactivity. Data on the level of students' physical fitness has been gathered since 1991. In 1998, the assessment was revised to align with national tests and trends. The number of students passing all four fitness components (cardiorespiratory, flexibility, upper body strength and endurance, and abdominal strength and endurance) has been fairly stable since 1998. Some decline in scores was evidenced in 2000, which might be attributed to higher standards for consistent test administration.

Connecticut Physical Fitness Assessment: Percent Passing All Four Assessments 1998-2000

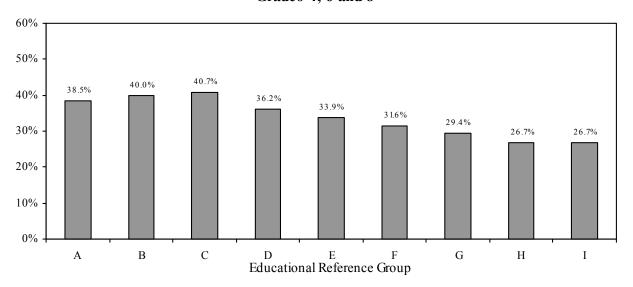


Connecticut Physical Fitness Assessment (continued)

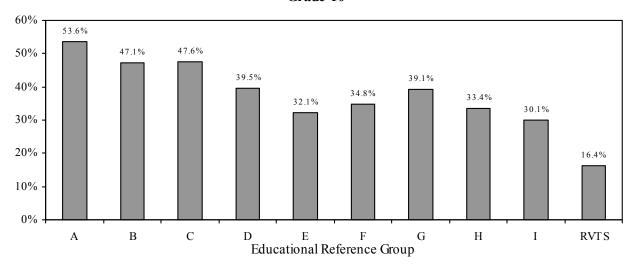
Many factors can contribute to a child's level of fitness. Of major importance is the amount and level of physical activity. Opportunities for physical activity can come from within the schools, i.e., the physical education program, recess, intramurals and interscholastic athletics. They must be complemented by those from outside of school such as walking or biking to and from school, accessible areas to play and be physically active, community park and recreation activities, before- and after-school programs that provide physical activity, and family recreational activities. When looking at the percentage of students passing the fitness assessment by Educational Reference Groups (ERGs), questions should be raised about the disparities in opportunities for all children to be physically active. It is a matter of concern that we see a clear pattern of decline in physical fitness as we move from ERG A to ERG I.

Connecticut Physical Fitness Assessment: Percent Passing All Four Assessments By Educational Reference Group and State Regional Vocational Technical System

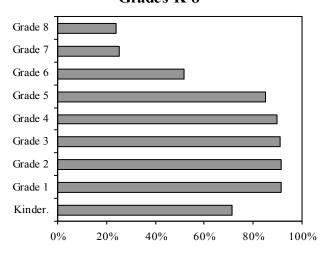
Grades 4, 6 and 8



Grade 10



Percent of Schools with Recess in Grades K-8



Recess

While recess is separate and distinct from physical education. it does provide children with discretionary time and opportunities to engage in physical activity that helps develop healthy bodies and the enjoyment of movement. Recess should not replace the time spent in physical education, but should be unstructured playtime where children have choice, use skills of decision making and conflict resolution and release energy and stress. The National Association of Elementary School Principals and the National Association for the Education of Young Children support regular recess time as a component of a child's physical and social development.

Intramurals

Intramural programs provide an equal opportunity for every student to voluntarily participate in physical activity both before and after school. Traditionally, these activities have been competitive in nature. More recently, efforts to expand participation have brought about the inclusion of self-directed activities, open gym, special events and field trips along with a focus on fitness and lifetime activities. Intramural offerings are encouraged in elementary, middle and high school. The largest number of offerings is at the middle school level, which is consistent with a team-based middle school model. Since 1993, there has been at least an 84 percent increase in the number of middle schools offering volleyball, basketball and soccer. Skiing and softball have seen a 35 percent increase in offerings.

Intramurals: Count of Schools with Selected Offerings Middle and High Schools									
	<u>Middle</u>	<u>High</u>		Middle	<u>High</u>		<u>Middle</u>	<u>High</u>	
Adventure programming	21	11	Fitness	45	43	Skiing	35	11	
Archery	8	4	Flag football	67	19	Soccer	82	19	
Baseball	20	3	Floor hockey	64	18	Softball	59	13	
Basketball	131	55	Golf	33	3	Swimming	13	3	
Bicycling	5	8	Gymnastics	18	2	Tennis	47	15	
Bowling	12	8	Hiking	7	13	Track and	38	3	
Cross country	40	7	In-line skating	9	1	field			
Dance	18	8	Lacrosse	15	2	Volleyball	114	34	
Field hockey	34	6	Other	47	45	Wrestling	20	5	